Update to the USMC Log Board on Total Life Cycle Management IPT Progress

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Mr. Greg Sieber
23 September 200

Agenda

0900	TLCM Project Background	Mr. Heaivilin
0915	TLCM Process	Mr. Sieber
0930	BREAK	
1000	IPT Results ▪Overview ▪Enterprise Level Maintenance Planning ▪Proposed Solutions ▪Improvement Examples	Mr. Sieber / IPT Leads
1045	Roles and Responsibilities	Mr. Heaivilin
1100	Way Ahead Discussion	MajGen Usher

Background

Background

- **DC I&L Priorities 2 and 3:**
  - **Increase equipment readiness through "cradle-to-grave" management of weapons systems**
  - **Improve combat readiness through innovation**
- **"…address in a comprehensive way the roles, responsibilities and policies for the TLCM Value Stream in order to optimize the effectiveness of the support it delivers to our Warfighters…"**

DC I&L Letter 22 Jan 2008

ESG Definition of the TLCM Problem

The Marine Corps is less capable of delivering and measuring combat readiness performance at all levels of the enterprise because:

- **TLCM is not well synchronized across multiple organizations, and with the Expeditionary Force Development System (EFDS) and the Planning, Programming, Budgeting and Execution System (PPBES)**
- **TLCM roles, responsibilities, relationships are not clear**
- **Reliable fact-based information for making decisions is lacking or not well synchronized across multiple organizations and with EFDS and PPBES**
- **Limited collaboration exists among stakeholders & their organizations**
- **Internal controls are absent/do not effectively support TLCM phases**
- **Full cost, standard process, standards outputs, and performance metrics are lacking**

NO ONE IS IN CHARGE !

IPT Membership

Executive Steering Group Oversight

I&L - ADC
I&L - LPC / LPV
I&L - LSX / CNA
I&L - LR MCBEO
MARCORLOGCOM
MARCORSYSCOM
PEO LS
CD&I / MCCDC
PP&O

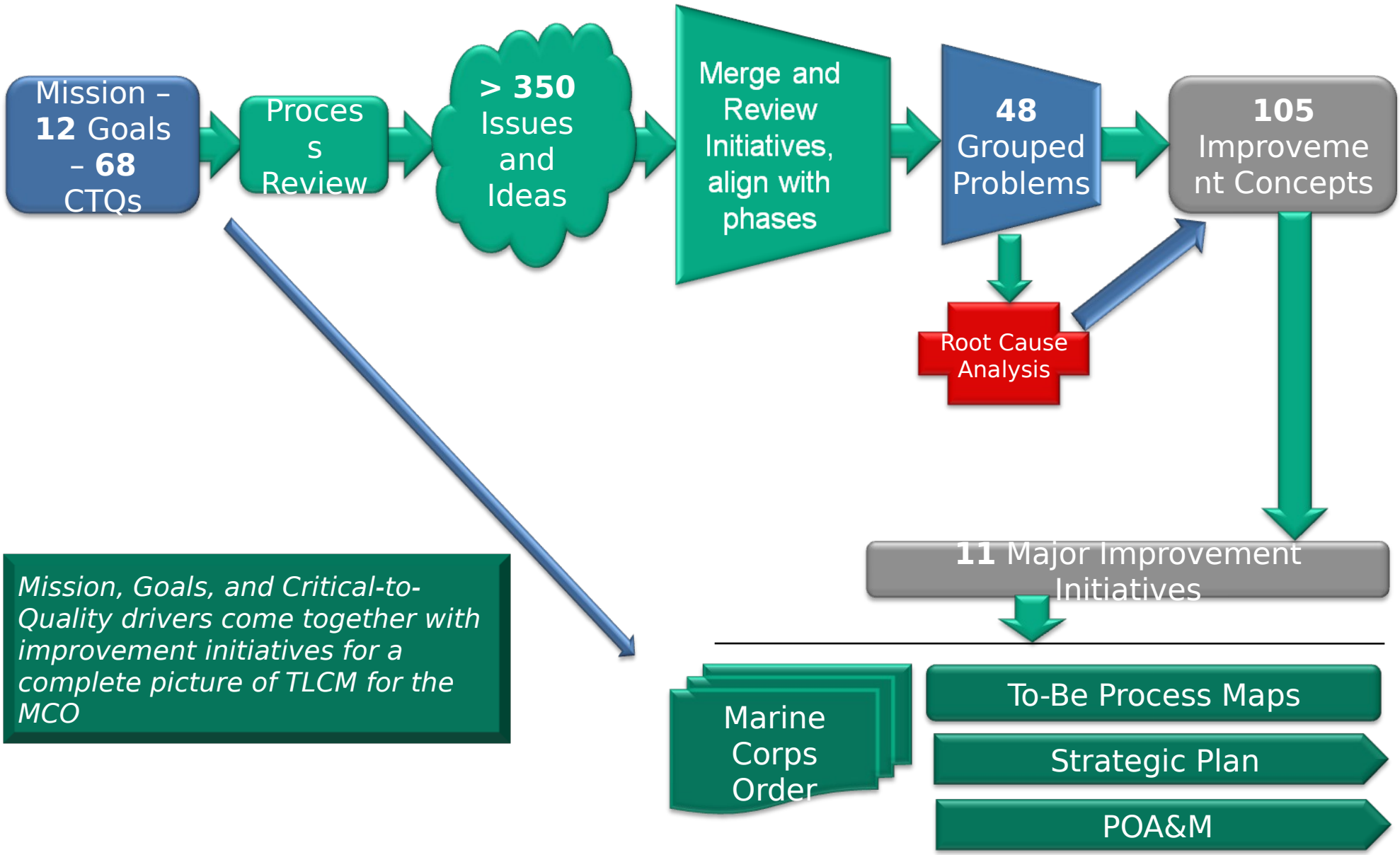
M&RA
P&R
AVN
MARFORCOM
MARFORPAC
MARFORRES
INTEL
C4
CL

IPT Project Milestones

MILESTONE STATUS	DATE	STATUS
Charter Signing	2-May	Complete
IPT Workshop 1 Initial 5-day TLCM Value Stream Orientation/Mapping	5 - 9 May	Complete
ESG Meeting 1 Review IPT Deliverables	15 May	Complete
IPT Workshop 2 Continue TLCM Value Stream Mapping	28 - 30 May	Complete
ESG Meeting 2 Review 1ST Draft "As-Is" Maps	12 Jun	Complete
IPT Workshop 3 First Draft "To-Be" Maps	24 - 26 Jun	Complete
IPT Workshop 4 Review To-Be Process Maps and Roles, Responsibilities for MCO	22-25 Jul	Complete
ESG Meeting 3 Review To-Be Process and Roles, Responsibilities & Relationships	15-Aug	Complete
Senior Mentor Review	8-Sep	Complete
IPT Workshop 5 Leadership and Management Model, MCO Content	9-12 Sep	Complete
ESG Meeting 4 Executive Brief on MCO and Roles, Responsibilities & Relationships	16 Sep	Complete
Brief LOG BOARD	23 Sep	In Process
IPT Workshop 6 POA&M for Way Ahead, Final Deliverables Review	30 Sep – 2 Oct	On Schedule
MCO Out for Formal Staffing / DC Comment	3 Nov	
MROC Brief	Nov-Dec 08	
MCO Signed	Jan 09	
Begin POA&M Implementation Phase	Jan 09	

TLCM Process

IPT Process Overview


Mission – **12** Goals – **68** CTQs
Process Review
> 350 Issues and Ideas
Merge and Review Initiatives, align with phases
48 Grouped Problems
105 Improvement Concepts
Root Cause Analysis
11 Major Improvement Initiatives
Mission, Goals, and Critical-to-Quality drivers come together with improvement initiatives for a complete picture of TLCM for the MCO
Marine Corps Order
To-Be Process Maps
Strategic Plan
POA&M

IPT Results

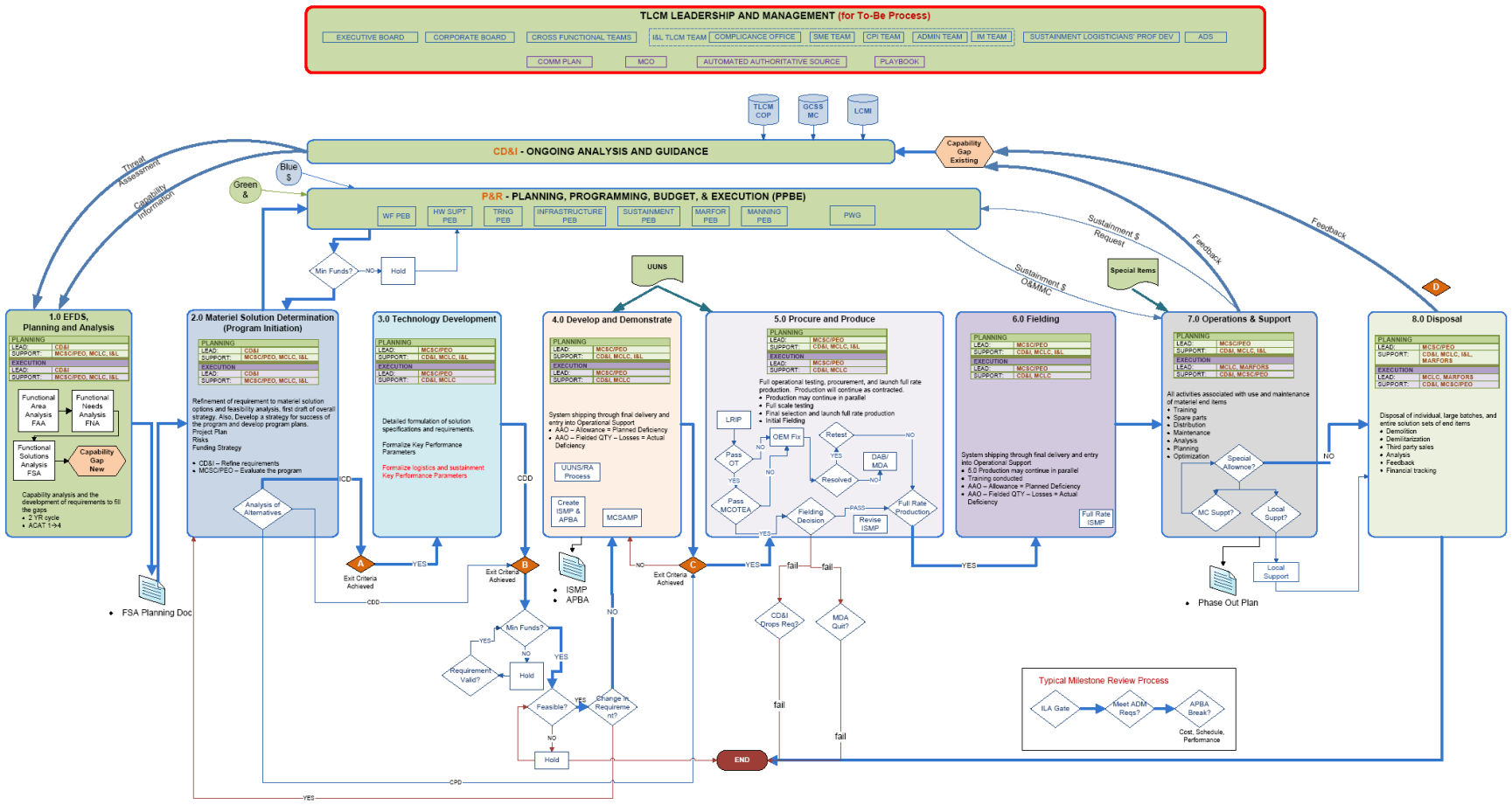
IPT Deliverables

	DELIVERABLE	STATUS
PRIMARY	As-Is Value Stream Maps (tiered)	Complete
	To-Be Value Stream Maps (tiered)	Final edits complete
	Roles, Responsibilities, Relationships	Final edits complete
	MCO	First draft being edited, final by 30 Sep
	IM Definition	Initial draft of maps and tables complete
	MROC Briefing	Preparing
SECONDARY	Assessment of the TLCM Value Stream	Complete
	Risk Assessment	Complete
	Issues List & CPI Opportunities Statements	Complete
	Way Ahead POA&M	30 Sep - 2 Oct
FOLLOW O	TLCM Policy Manual	TBD
	Broader analysis and move forward with CPI	FY09

Key IPT Findings

- TLCM is knowledge/human centric process
- TLCM is complex environment with variation
- TLCM governance is crucial
- Information is center of gravity
- TLCM funding process hinders sustainment
- Sustainment planning must be robust
- Collaboration is critical to success

TLCM TO-BE PROCESS - Level 0 Sep 2008



TOTAL LIFECYCLE MANAGEMENT, GROUND MATERIEL

TLCM - LEVEL 0

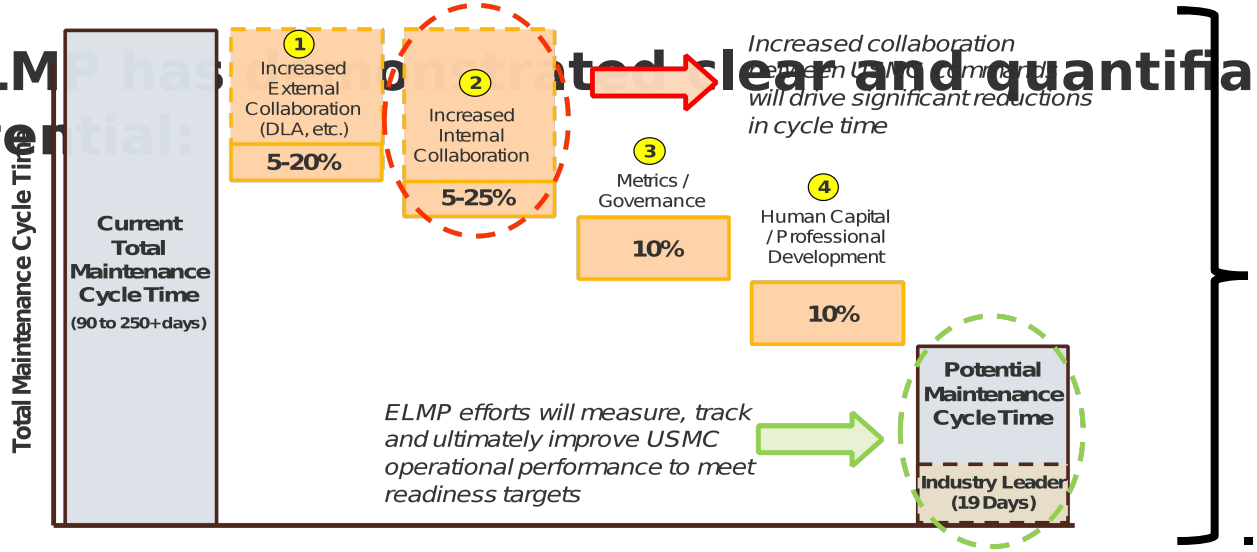
TLCM PROCESS MAPS MASTER.vsd
Edited: 6 September, 2008

Integrating Enterprise Level Maintenance Planning (ELMP) into TLCM

ELMP Objectives – Improving the confidence and reliability in Depot Maintenance Planning

- **Overall objective: ELMP is fixing Depot Maintenance Planning**
  - Forms the basis for input into the DoD Planning, Programming, Budgeting and Execution system for USMC Depot Level Maintenance Program (DLMP)
  - Improves the reliability and accuracy of USMC depot maintenance planning
  - Optimizes the budget so that limited funding is going to the most critical "readiness-items"
  - Reduces total repair cycle time, with a direct impact on *greater availability and readiness*
  - Increases efficiency and avoids costs associated with un-needed maintenance

- **ELMP has demonstrated clear and quantifiable improvement potential:**



Cycle time reduction will result in improvements to efficiency and cost while enabling better materiel availability

ELMP Project

- **Conducted a "Depot Maintenance" assessment of the end-to-end USMC**
- **The USMC Depot Maintenance Planning Process must experience a 'midlife overhaul'**
- **<u>Designed</u> and <u>piloted</u> a process focused on a more collaborative approach to planning**
- **Learned that the most critical issues exist at th handoff points between Commands**
- **Major actions are required of USMC Stakeholde**
- **Target metrics will be incorporated into the ELM governance structure**

We are now executing a focused, three-phase effort to implement the key actions

ELMP Expansion and Rollout

- Identify, plan, and conduct the next wave of ELMP Pilots
- Rollout process across all Programs with governance and performance tracking
- Educate the Enterprise on the ELMP process
- Implement recommendations for Price and Performance Model

Extension to Broader Planning Scenarios

- Extension of the Planning Process into the operational field units
- Extension of the ELMP process to conduct Depot Requirements planning in support of RESET / REFURB operations

Unit-Level, Capability-based Planning

- Expansion of the Lifecycle Maintenance Planning process and Price and Performance Models and tools to support Unit-Level Capability Based planning

Resolution of these actions will not be instantaneous; it will require:
• Active support from USMC leadership
• Alignment of all involved USMC stakeholders
…and it will take time

Proposed Solutions for Improvement

IPT Proposed Solutions

- **Assign roles, responsibilities, relationships**
- **Publish Appropriate Policy**
- **Improve workforce capability**
- **Institutionalize quality management/measurement**
- **Improve the TLCM process**
- **Improve Depot Maintenance process (e.g., ELMP)**
- **Enable the process with technology**
- **Improve TLCM tools**
- **Improve TLCM communications**
- **Improve TLCM data and info management**

Improvement Examples:

- **Assign roles, responsibilities, relationships**
  - Establish TLCM decision board
  - Implement strategic planning & goal deployment process
  - Create tiered, TLCM cross-functional teams
  - Establish TLCM management office

- **Publish appropriate policy**
  - Publish TLCM MCO
  - Improve funding policies
  - De-conflict existing policies

Improvement Examples:

- **Improve workforce capability**
  - Create workforce excellence program (e.g., cross training)
  - Place TLCM performance metrics into leadership objectives
  - Establish TLCM mentoring program
  - Conduct annual TLCM refresher training

- **Institutionalize quality management**
  - Establish metrics and measurement system
  - Establish accountability for metrics
  - Deploy customer satisfaction program
  - Deploy Continuous Process Improvement (CPI)

Improvement Examples:

- **Improve the TLCM process**
  - Design and implement feedback process
  - Improve requirements determination (e.g., UUNS)
  - Integrate sustainment requirements into front end
  - Ensure comprehensive/enforceable tasking process
  - Define, institutionalize, automate Program Management triggers
  - Design/implement portfolio management processes
  - Refine and enforce comprehensive systems engineering approach

- **Improve/integrate Depot Maintenance process (e.g., ELMP)**

Improvement Examples:

- **Enable the process with technology**
  - Create modeling and simulation capability
  - Create data repository portal
  - Develop end-to-end TLCM Information Technology, Information Management, Knowledge Management (IT / IM / KM) requirements
  - Implement project management technology
  - Implement process automation system

- **Improve TLCM tools**
  - Standardized checklists and templates
  - Create TLCM playbook / reference guide

Improvement Examples:

- **Improve TLCM communications**
  - Formalize feedback processes
  - Develop handbooks and playbooks for participants
  - Implement TLCM Communications Plan

- **Improve TLCM data and info management**
  - Institutionalize TLCM enterprise architecture
  - Create TLCM compliance team
  - Cross train / assign people within TLCM roles

TLCM Roles and Responsibilities

I&L Roles and Responsibilities

- Serve as the TLCM Value Stream steward
- Lead TLCM strategic planning and goal deployment
- Develop integrated TLCM Enterprise Architecture that:
  - **Provides TLCM IT / IM / KM services**
  - **Provides enterprise-wide asset management capabilities**
  - **Provides visibility of full life cycle costs**
  - **Provides TLCM performance measurement capability**
- Develop TLCM policy and resource requirements (dollars and manpower)
- Integrate the TLCM processes
- Lead TLCM Workforce development
- Provide TLCM administrative support
- Provide Continuous Process Improvement leadership
- Provide Integrated Logistic Support assessments

Establish I&L role as the G-4 of the Marine Corps

Roles and Responsibilities

- **CD&I: Requirements process steward**
  - Develop and Validate operational capability
- **MCSC: Acquisition process steward**
  - Execute the creation, delivery, support and performance of each Materiel Solution for the entire lifecycle of the program
- **MCLC: Sustainment process steward**
  - Execute & Manage Distribution, Supply Chain Management, Maintenance & Fielding Support, Continuous Sustainment Assessments & Lifecycle Planning
- **OPFORs: Operational process owner**
  - Account for and maintain equipment
  - Sustain readiness
  - Assist in requirement definition
- **M&RA: Manpower process steward**
- **TECOM: Training process steward**
- **P&R: Fiscal process steward**

Way Ahead

- **MCO to institutionalize**
  - **Roles, responsibilities and relationships**
- **POA&M to define**
  - **Prioritized list of improvement actions**
  - **Accountability and schedule**

Way Ahead Discussion

Questions?

Backup Slides

We conducted a "Depot Maintenance" assessment of the *end-to-end* USMC

Aug 2007 to Jan 2008 | *Feb 2008 to July 2008* | *2008 - 2010*

1. As is Process and Model Assessment
2. To be Process and Model Design
3. Piloting of New Processes and Conduct Model Assessment
4. Expanded Pilots and ELMP Implementation

We are Here

MCSC / PEO LS
- SMC
- LCC
- MMC
- MCA
- MCB
- P&R

CD&I

OSD
- DUSD (LM&R)
  - ADUSD - Maint

MCSC / PEO LS
- PEO LAND
- PGD / PM
  - GTES
  - M1A1
  - LAV

HQMC
- LPC
- LPV
- LCE
- LPO
- LSR

MARFORs
- I MEF
- II MEF
- III MEF
- MARFORRES
- MARFORPAC
- MARFORSOC

Other
- TECOM
- EEAP

Commercial
- GE – Water
- UPS
- WW Williams

Other Organic
- TACOM
- Army G-4
- Anniston
- Warner Robins
- Naval Aviation

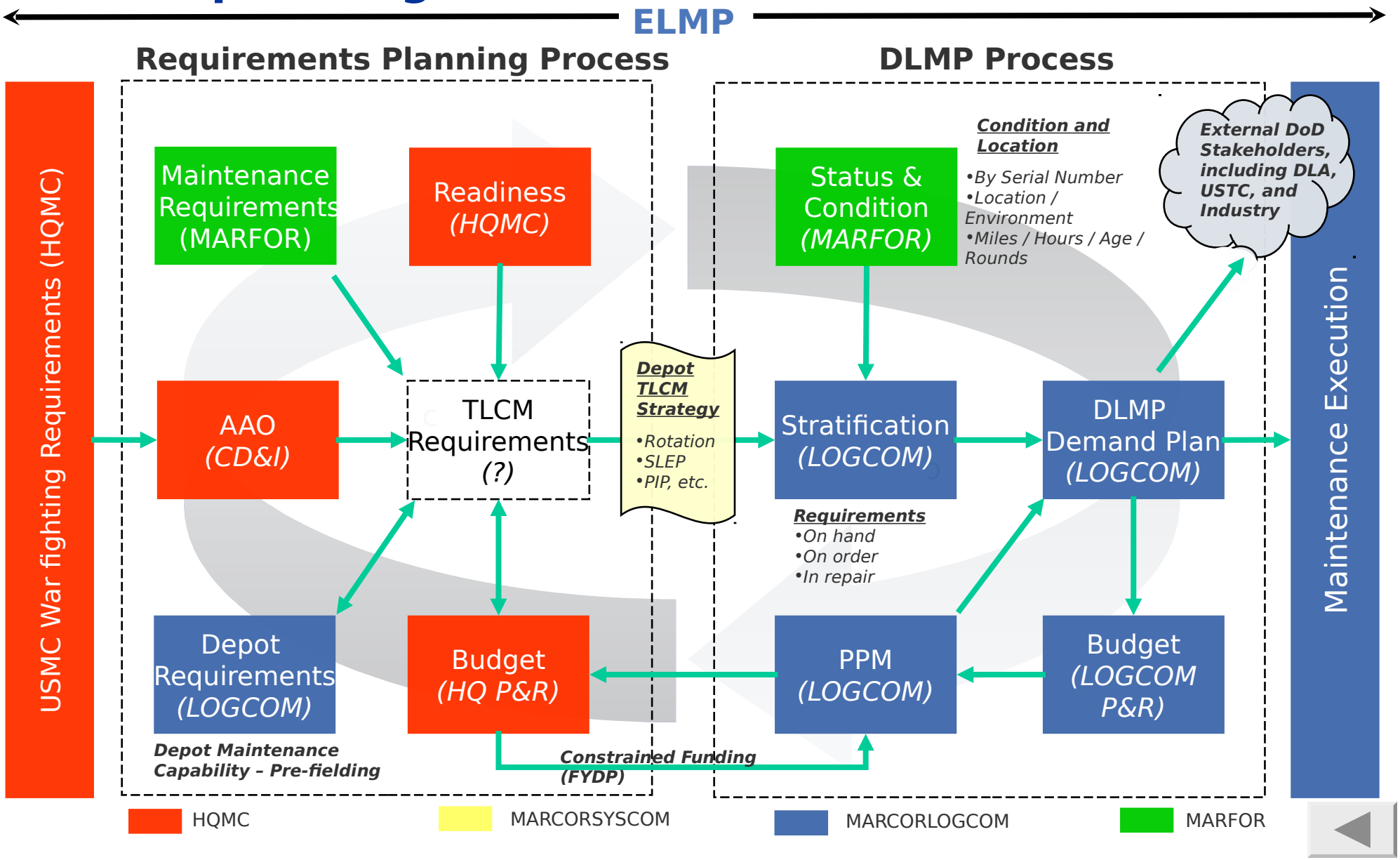
The USMC Depot Maintenance Planning Process must experience a 'midlife overhaul'

DLMP ⟶ **ELMP**

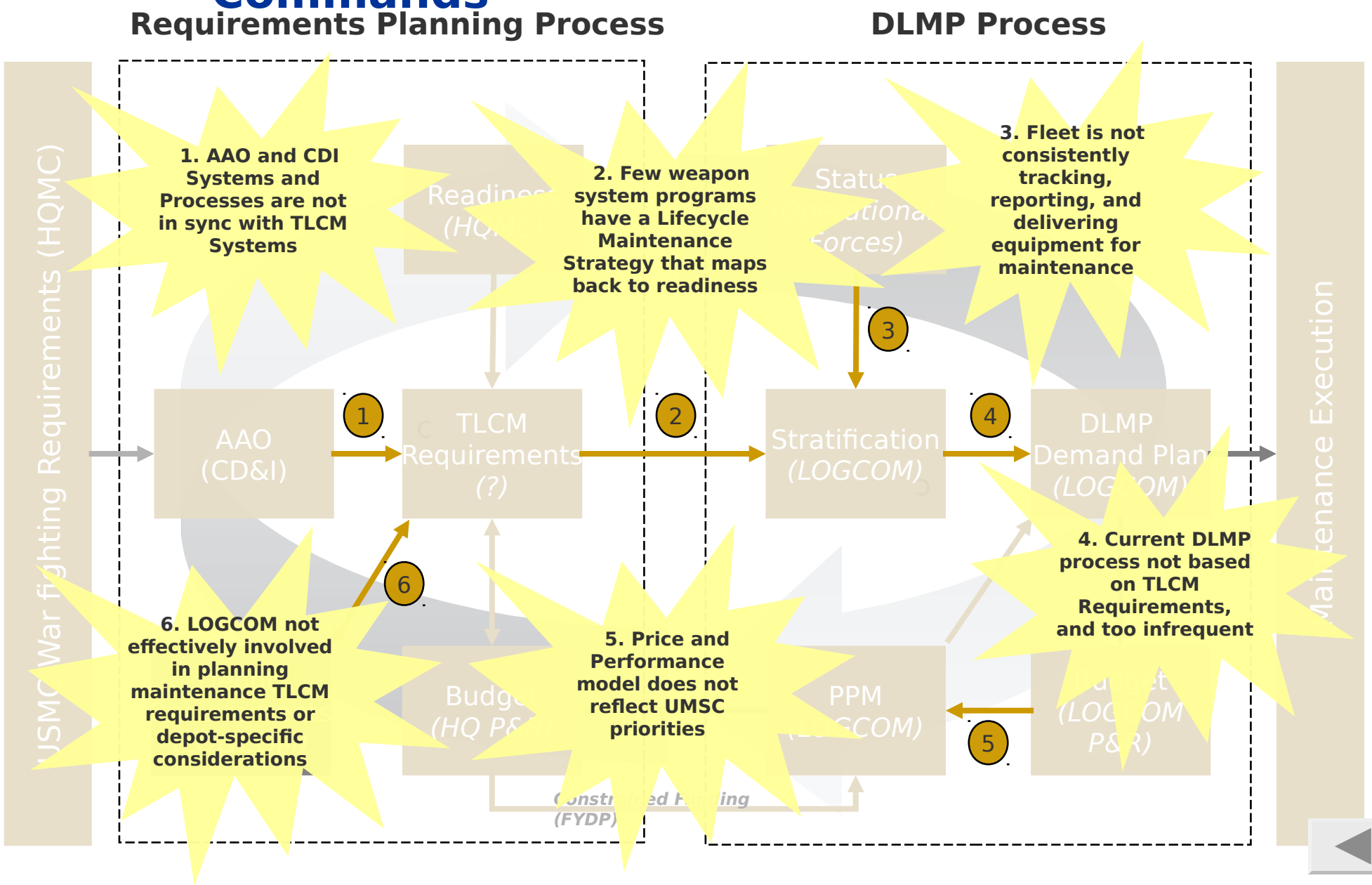
ELMP = Enterprise Lifecycle Maintenance Planning

Assessment Findings	Actions Being Taken
Minimal collaboration between stakeholders	"To-be" process drives collaboration where necessary
DLMP Conference drove maintenance requirements	Maintenance requirements are a function of true unconstrained demand
DERO Model as a suboptimal planning tool	Robust Price & Performance Model optimizes maintenance planning
Lack of effective metrics to measure performance of depot maintenance planning processes	Implementation of Performance Measurement Framework drives operational improvements

We designed and piloted a process focused on a more collaborative approach to planning



We have learned that the most critical issues exist at the *handoff points* between Commands


Requirements Planning Process
DLMP Process
1. AAO and CDI Systems and Processes are not in sync with TLCM Systems
2. Few weapon system programs have a Lifecycle Maintenance Strategy that maps back to readiness
3. Fleet is not consistently tracking, reporting, and delivering equipment for maintenance
4. Current DLMP process not based on TLCM Requirements, and too infrequent
5. Price and Performance model does not reflect UMSC priorities
6. LOGCOM not effectively involved in planning maintenance TLCM requirements or depot-specific considerations
AAO (CD&I)
TLCM Requirements (?)
Stratification (LOGCOM)
DLMP Demand Plan (LOGCOM)
PPM (LOGCOM)
(LOGCOM P&R)
(FYDP)
1
2
3
4
5
6

Major actions are required of USMC Stakeholders

MARCORLOGCOM

- Clearly delineate critical information requirements in support of the DLMP process
- Consistently and repeatedly execute ELMP process – with collaboration with the MARFORs and SYSCOM to refine the Maintenance Plan
- Refine and gain USMC-wide acceptance of planning business rules and parameters for PPM
- Align ELMP planning with Depot Execution

MARCORSYSCOM

- Develop robust strategy for managing requirements over the weapon system's lifecycle to include evacuation criteria, rotation schedules, PIPs, and SLEPs – must be synchronized to the budget
- Consistently and repeatedly update / refine the lifecycle strategy with a single process that drives unconstrained requirements with standard inputs and outputs for all programs

HQMC / CD&I

- Publish clear Policy and Guidance to support creation and documentation of TLCM processes and specific activities, not just roles and responsibilities.
- Synchronize FYDP budget development and requests with projected Lifecycle Demand requirements – unconstrained demand plan should drive budget submission and be "locked" in defined time windows

MARFORs

- Accurately track condition and location of weapon system assets by serial number – and *measure* the accuracy of this process
- Collaborate proactively in the ELMP process to develop a maintenance plan – and understand out-year funding constraints and impacts
- Comply with the agreed-upon returns plan – and there must be a metric that looks at compliance to the returns plan – Justify changes to returns plan

Target metrics will be incorporated into the ELMP governance structure

		Pilot Objectives					
Attributes	Proposed LOGCOM Metrics	Actionable	SCOR Based	Customer Focused		Weapons System Oriented	Initiative Aligned
				Internal	External		
Reliability	On-Time Delivery to Promise Date	✓	✓	✓	✓	✓	✓
Responsiveness	Returns Cycle Time	✓	✓	✓	✓	✓	✓
	Repair Cycle Time	✓	✓	✓	✓	✓	✓
	Delivery Cycle Time	✓	✓	✓	✓	✓	✓
Flexibility	Production Upside Flexibility	✓	✓	✓	✓	✓	
Cost Efficiency	Total Supply Chain Management Costs (TSCMC)	✓	✓	✓	✓	✓	✓
Predictability	Maintenance Plan Accuracy	✓	✓	✓	✓	✓	✓
	Returns Plan Compliance	✓		✓		✓	✓
Quality	Effectiveness of Depot Repair	✓		✓	✓	✓	✓

- Definitions will be outcome oriented and aligned with Best Practices
- Level 1 metrics are supported by various process and diagnostic Level 2 and 3 metrics
- All metrics will enable overall Weapons System "Cost-Optimal Readiness"